

STUDY ON THE IDENTIFICATION OF THE CHARACTERISTICS OF ELECTRIC MOTORS IN THE DEVELOPMENT OF ELECTRIC VEHICLES, UNY – UMP

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ABSTRACT

The development of electric vehicle is one of the Indonesian Government's commitments to reduce emissions by 29% by 2030. The government's role is very large in encouraging national automotive industry players to produce electric vehicle. The electric motor is a basic component in the electric vehicle drive system. In research, overseas cooperation focuses on the process of determining the design of an electric motor, such as identifying needs, designs, implementing processes, testing, verification and validation.

This research is important in designing a high efficient electric motor. The greater the efficiency of the electric motor design, the production price can be optimized and the performance of the electric motor can be maximized. With the collaboration program with foreign universities, Universiti Malaysia Pahang (UMP), Faculty of Manufacturing and Mechatronics Engineering Technology it is able to provide solutions in the development and industry of electric vehicles in Indonesia.

In this research, it has a very big impact in realizing the academic enculturation and acculturation scenario on the vision, mission and objectives of Universitas Negeri Yogyakarta (UNY). It is expected that the final result of this study will increase the level of domestic components (TKDN) in the electric vehicle industry.

Kata Kunci: *design, electric motor, electric vehicle, TKDN*